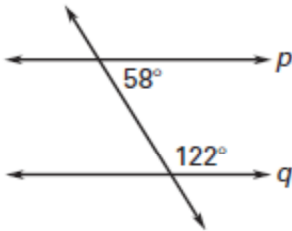


# TARGET 3E

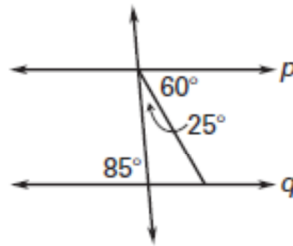
Name \_\_\_\_\_ Date \_\_\_\_\_

Is there enough information to prove that lines  $p$  and  $q$  are parallel? If so, state the postulate or theorem you would use.

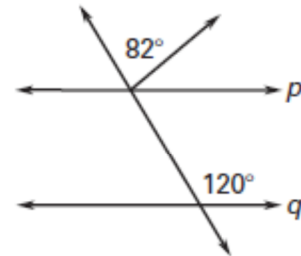
1.



2.

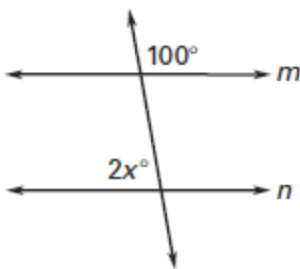


3.

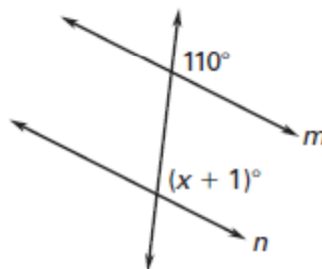


Find the value of  $x$  that makes  $m \parallel n$ .

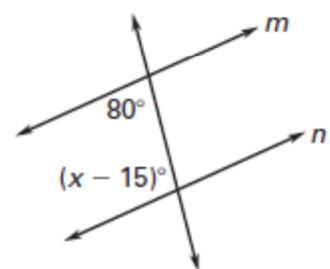
4.



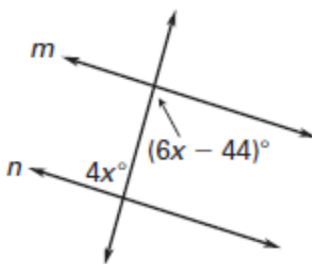
5.



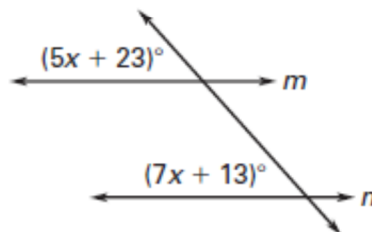
6.



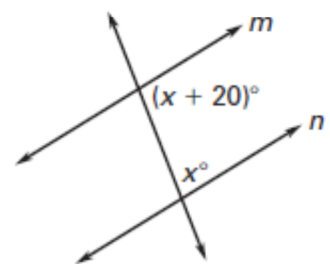
7.



8.



9.



For #10 - 19, use the given information to decide which pair of lines are parallel.

10.  $\angle 4 \cong \angle 9$

11.  $\angle 2 \cong \angle 7$

12.  $\angle 12 \cong \angle 13$

13.  $\angle 5 \cong \angle 16$

14.  $\angle 6 \cong \angle 15$

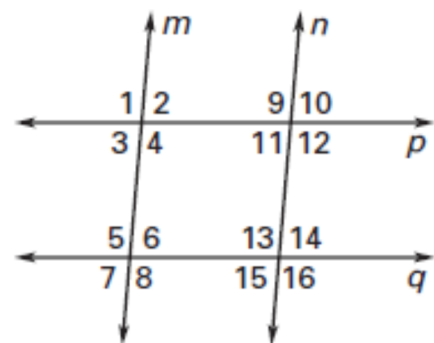
15.  $\angle 9 \cong \angle 16$

16.  $\angle 4 + \angle 6 = 180$

17.  $\angle 1 + \angle 10 = 180$

18.  $\angle 6 + \angle 13 = 180$

19.  $\angle 9 + \angle 15 = 180$



### TARGET 3E ANSWERS

1. yes; Consecutive Interior Angles Converse
2. yes; Alternate Interior Angles Converse
3. no
4. 40
5. 109
6. 115
7. 22
8. 5
9. 80
10.  $m \parallel n$
11.  $p \parallel q$
12.  $p \parallel q$
13.  $m \parallel n$
14.  $m \parallel n$
15.  $p \parallel q$
16.  $p \parallel q$
17.  $m \parallel n$
18.  $m \parallel n$
19.  $p \parallel q$